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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,731	02/11/2002	Hanns Rump	MSAZ47	8230
7590	03/23/2004			
EXAMINER				
MAYEKAR, KISHOR				
ART UNIT			PAPER NUMBER	
1753				

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/030,731	Applicant(s) RUMP ET AL.	
	Examiner Kishor Mayekar	Art Unit 1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02/11/2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/7/02</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Specification*

1. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

However, if the abstract of the national stage application is used, the abstract is objected because it is not within the range of 50-150 words.

2. The disclosure is objected to because of the following informalities:
  - the referral to claim 1 in line 9 of page 1 of the specification;
  - the end character "°" as in the phrase "electrodes°" in line 10 of page 2 and throughout the specification (emphasis added);
  - the wording starting in page "4 new" does not follow with the wording in page 3;
  - the last paragraph in page "4 new" is incomplete (emphasis added);
  - the wording starting in page "7 new" does not follow with the wording in page 6;

- the wording starting in page "10 new" does not follow with the wording in page 9;
- the wording starting in page "10a new" does not follow with the wording in page 11; and
- the incorrect reference character in the phrase "the lower electrode 5".

Appropriate correction is required.

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

4. Claims 1-17 are objected to because of the phrase "characterized in that" in claims 1-17 is not conforming to standard U.S. practice and because of the typo error in the phrase "each have a dielectric constant" (emphasis added). Appropriate correction is required.

### *Drawings*

5. The drawing in Fig. 1 is objected to as the reference character "6" is not described in the specification.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1, 2, 4-10, 12, 13, 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the phrase "one of the main surface" lacks antecedent basis (emphasis added). The phrase "whereby" (in two occurrences) is preferred to change to --wherein-- to eliminate reference to an action follows the phrase that does not necessarily occur. The phrases "which is exposed to air" and "the minor discharge effect occurs" are indefinite for the reference to a method of operating the device.

In claim 2, the phrase "the distance" lacks antecedent basis and is confusing as to what distance is claimed. The same is applied to claim 1 to the phrase "whereby".

In claim 4, the same is applied to claim 1 to the phrase "whereby". The phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

In claim 5, the same is applied to claim 1 to the phrase "whereby".

In claim 6, the same is applied to claim 1 to the phrase "whereby".

In claim 7, the same is applied to claim 1 to the phrase "whereby". The phrase "preferably" (in two occurrences) renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention.

In claim 8, the same is applied to claim 1 to the phrase "whereby".

In claim 9, the same is applied to claim 1 to the phrase "whereby".

In claim 10, the same is applied to claim 1 to the phrase "whereby". The phrase "the supply point" lacks antecedent basis.

In claim 12, the phrase "either of graphite ... iron oxide" is confusing when the term means "the choice between only two options" and the claim recites more than two options. Also the above phrase is confusing because it recites two many "or" (emphasis added). The phrase "such as" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

In claim 13, the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

In claim 15, the same is applied to claim 1 to the phrase "whereby".

In claim 16, the phrase "are grounded ... earth" is indefinite for the reference to a method of operating the device.

***Allowable Subject Matter***

8. Claims 1-17 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

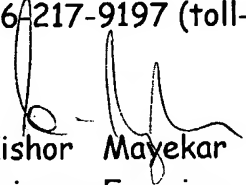
9. The following is a statement of reasons for the indication of allowable subject matter: Because the prior art references do not disclose in a device to generate plasma for the production of ozone and/or oxygen ions in the air, the provision of the recited element consisting of a (or two) flat, electrically insulating carrier(s) with the recited dielectric constant, the recited at least one electric insulating layer with the recited dielectric constant that only partially covers the front of the carrier(s) and the recited band-shaped electrode that only partially covers the insulating layer in combination with other recited structures as claimed in claims 1-17.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (571) 272-1339. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kishor Mayekar  
Primary Examiner  
Art Unit 1753